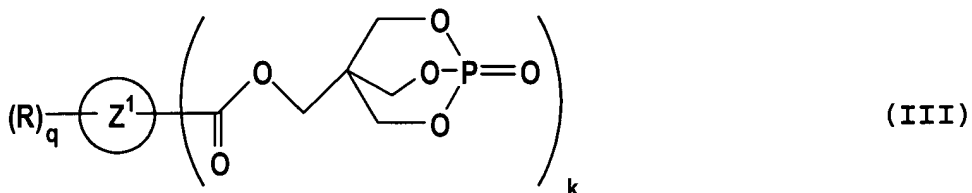
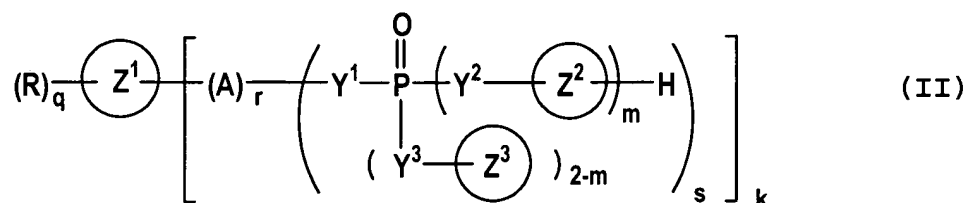
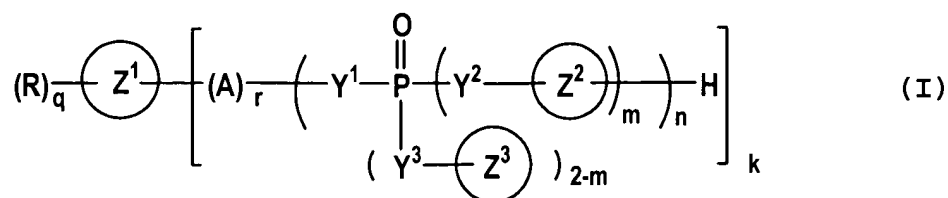


AMENDMENTS TO THE CLAIMS

1. (currently amended) A phosphorus-containing compound represented by the following formula (I), (II) or (III):



wherein Z^1 , Z^2 and Z^3 are the same or different, each representing a cycloalkane ring, a cycloalkene ring, a polycyclic aliphatic hydrocarbon ring or an aromatic hydrocarbon ring, in which these rings may have a substituent; R represents a halogen atom, a hydroxyl group, a carboxyl group, a halocarboxyl group, an alkyl group, an alkoxy group, an alkenyl group or an aryl group; A represents a polyvalent group corresponding to an alkane; Y^1 , Y^2 and Y^3 are the same or different, each representing -O-, -S- or -NR¹-

wherein R^1 represents a hydrogen atom or an alkyl group; k represents an integer of 1 to 6; m represents an integer of 0 to 2; n represents an integer of not less than 1; q represents an integer of 0 to 5; r represents 0 or 1; s represents an integer of 1 to 4; and

provided that when Z^1 is a cyclohexane ring, q is 0, and k is 1, factor r for A is 1; when Z^1 is a cyclohexane ring, q is 0, and k is 2 to 6, at least one of plural factors r for A is 1; and when Z^1 is a benzene ring and k is 1, the factor r for A is 1; when Z^1 is a benzene ring and k is 2 to 6, at least one of plural factors r for A is 1; and bis((1-oxo-2,6,7-trioxa-1-phosphabicyclo[2.2.2]-oct-4-yl)methyl) 2,5-dibromoterephthalate, 1,4-cyclohexanedimethanol bis(diaryl phosphate), (1-oxo-2,6,7-trioxa-1-phosphabicyclo[2.2.2]-oct-4-yl)methyl benzoate, (1-oxo-2,6,7-trioxa-1-phosphabicyclo[2.2.2]-oct-4-yl)methyl cyclohexanecarboxylate, tris(tricyclo[5.2.1.0^{2,6}]decane) phosphate, 2-carboxy-3-diphenylphosphoroxynorbornane, and 3-diphenylphosphoroxynorbornane are excluded.

2. (original) A phosphorus-containing compound according to claim 1, wherein the rings Z^1 , Z^2 and Z^3 each is a dicyclic or tricyclic aliphatic hydrocarbon ring.

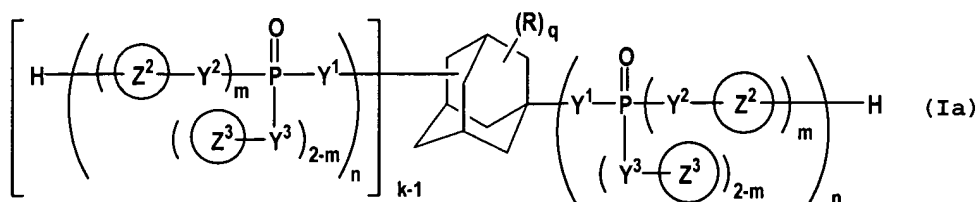
3. (original) A phosphorus-containing compound according to claim 1, wherein the ring Z^1 is a norbornane ring, an adamantane ring, a tricyclo[5.2.1.0^{2,6}]decane ring, or a benzene ring, and the rings Z^2 and Z^3 each is an adamantane ring or a benzene ring.

4. (original) A phosphorus-containing compound according to claim 1, wherein R is a halogen atom, a hydroxyl group, a C₁₋₄alkyl group, or a C₁₋₄alkoxy group in the formula (I).

5. (original) A phosphorus-containing compound according to claim 1, wherein each Y^1 , Y^2 and Y^3 represents -O-.

6. (original) A phosphorus-containing compound according to claim 1, wherein k is an integer of 1 or 2, n is 1, and q is an integer of 0 to 2.

7. (original) A phosphorus-containing compound according to claim 1, wherein a phosphorus-containing compound of the formula (I) is represented by the following formula (Ia):



wherein the Z^2 , Z^3 , R, Y^1 , Y^2 , Y^3 , k, m, n and q have the same meanings as defined above.

8. (original) A phosphorus-containing compound according to claim 7, wherein, in the formula (Ia), Z^2 and Z^3 are the same or different, each representing a benzene ring or an adamantane ring in which these rings may have a substituent; R is a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group, or a C₁₋₆ alkoxy group; Y^1 , Y^2 and Y^3 each is -O- or -NR¹- (wherein R¹ represents a hydrogen atom or a C₁₋₄alkyl group)); k is an integer of 2 to 4; n is an integer of 1 to 3; and q is an integer of 0 to 4.

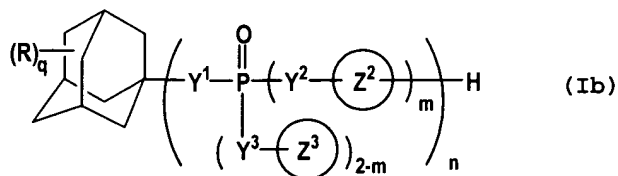
9. (original) A phosphorus-containing compound according to claim 7, wherein, in the formula (Ia), Z^2 and Z^3 are the same or different, each representing a benzene ring which may have a

substituent; R is a C₁₋₄alkyl group; n is 1; and q is an integer of 0 to 2.

10. (original) A phosphorus-containing compound according to claim 7, wherein a compound represented by the formula (Ia) is an adamantyl bis, tris or tetrakis-(di C₆₋₁₀ aryl phosphate) or an adamantylbis, tris or tetrakis(di C₆₋₁₀ aryl phosphoramidate).

11. (original) A phosphorus-containing compound according to claim 7, wherein a compound represented by the formula (Ia) is adamantylbis(diphenylphosphate), dimethyladamantyl bis(diphenylphosphate), or adamantyltris(diphenyl phosphate).

12. (original) A phosphorus-containing compound according to claim 1, wherein a compound of the formula (I) is represented by the following formula (Ib):



wherein the Z², Z³, R, Y¹, Y², Y³, m, n and q have the same meanings as defined above.

13. (original) A phosphorus-containing compound according to claim 12, wherein, in the formula (Ib), Z^2 and Z^3 are the same or different, each representing a benzene ring or an adamantane ring in which these rings may have a substituent; R is a halogen atom, a hydroxyl group, a C₁₋₆ alkyl group, or a C₁₋₆ alkoxy group; Y¹, Y² and Y³ are the same or different, each representing -O- or -NR¹- wherein R¹ represents a hydrogen atom or a C₁₋₄ alkyl group; and q is an integer of 0 to 4.

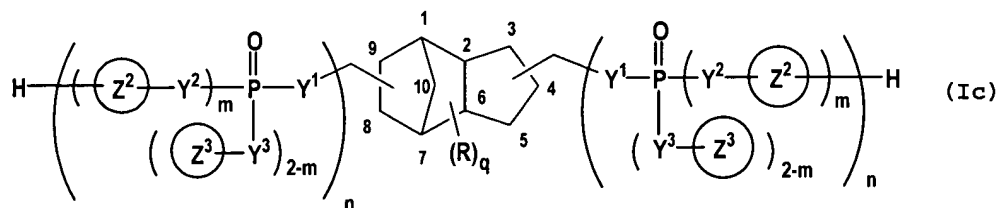
14. (original) A phosphorus-containing compound according to claim 12, wherein, in the formula (Ib), R is a hydroxyl group, a C₁₋₄ alkyl group, or a C₁₋₄ alkoxy group, and q is an integer of 0 to 2.

15. (original) A phosphorus-containing compound according to claim 12, wherein a compound represented by the formula (Ib) is an adamantyl di C₆₋₁₀ arylphosphate or a diadamantyl C₆₋₁₀ arylphosphate .

16. (original) A phosphorus-containing compound according to claim 12, wherein a compound represented by the formula (Ib) is

adamantyldiphenylphosphate, dimethyladamantyl diphenylphosphate, or bis(adamantyl)phenylphosphate.

17. (original) A phosphorus-containing compound according to claim 1, wherein a compound of the formula (I) is represented by the following formula (Ic):



wherein the Z^2 , Z^3 , Y^1 , Y^2 , Y^3 , m , n and q have the same meanings as defined above.

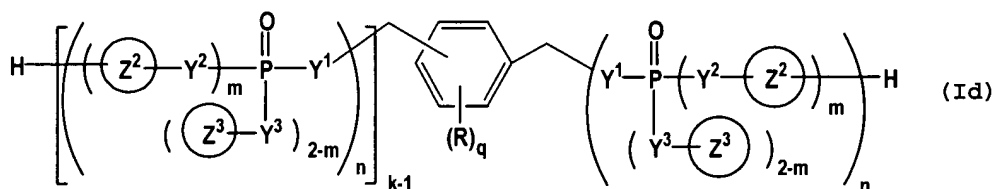
18. (original) A phosphorus-containing compound according to claim 17, wherein, in the formula (Ic), Z^2 and Z^3 each is a benzene ring which may have a substituent; R is a halogen atom, a hydroxyl group, a C_{1-6} alkyl group, or a C_{1-6} alkoxy group; and Y^1 , Y^2 and Y^3 are -O-.

19. (original) A phosphorus-containing compound according to claim 17, wherein a compound represented by the formula (Ic) is bis[(di C_{6-10} arylphosphoroxy) methyl]tricyclo [5.2.1.0^{2,6}]decane.

20. (original) A phosphorus-containing compound according to claim 17, wherein a compound represented by the formula (Ic) is bis[(diphenylphosphoroxy)methyl]tricyclo[5.2.1.0^{2,6}]decane.

21. (original) A phosphorus-containing compound according to claim 17, wherein a compound represented by the formula (Ic) is (4R,8S)-bis(diphenylphosphoroxymethyl)-(1R,2S,6R,7R)-tricyclo[5.2.1.0^{2,6}]decane.

22. (original) A phosphorus-containing compound according to claim 1, wherein a compound of the formula (I) is represented by the following formula (Id):

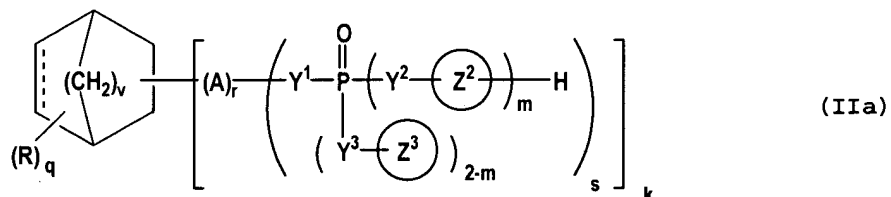
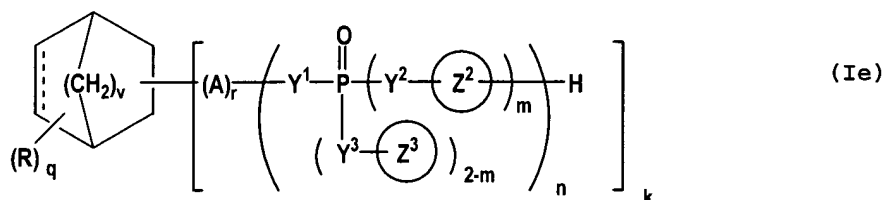


wherein the Z², Z³, R, Y¹, Y², Y³, m, n and q have the same meanings as defined above.

23. (original) A phosphorus-containing compound according to claim 22, wherein, in the formula (Id), Z² and Z³ each is a benzene ring which may have a substituent; and Y¹, Y² and Y³ are -O-.

24. (original) A phosphorus-containing compound according to claim 22, wherein a compound represented by the formula (Id) is xylyleneglycolbis(diphenylphosphate).

25. (original) A phosphorus-containing compound according to claim 1, wherein a compound of the formula (I) or (II) is represented by the following formula (Ie) or (IIa):



wherein the following structure

1 2 3 4 5 6

means a single bond or a double bond, v is an integer of 0 to 2;
and Z^2 , Z^3 , R , A , Y^1 , Y^2 , Y^3 , m , n , q , r and s have the same
meanings as defined above.

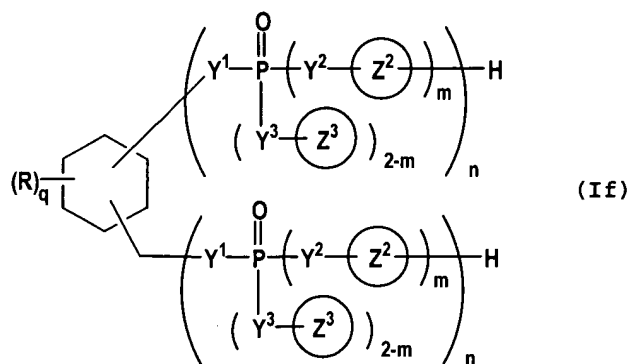
26. (original) A phosphorus-containing compound according to claim 25, wherein, in the formula (Ie) or (IIa), Z^2 and Z^3 each is a benzene ring which may have a substituent; R is a halogen atom, a hydroxyl group, a C_{1-6} alkyl group which may have a substituent, a C_{1-6} alkoxy group which may have a substituent, or an alkenyl group which may have a substituent; and Y^1 , Y^2 and Y^3 are -O-.

27. (original) A phosphorus-containing compound according to claim 25, wherein, in the formula (Ie), n is 1; q is an integer of 0 to 2; r is 1; and s is an integer of 1 to 2.

28. (original) A phosphorus-containing compound according to claim 25, wherein a compound represented by the formula (Ie) or (IIa) is bis(diphenylphosphoroxo)norbornane;
bis(diphenylphosphoroxo C_{1-4} alkyl)norbornane;
bis(diphenylphosphoroxo)-4- C_{2-4} alkenylcyclohexane;
(diphenylphosphoroxo C_{1-4} alkyl)cyclohexene; mono, di or tri- C_{1-4} alkyl(diphenylphosphoroxo C_{1-4} alkyl)cyclohexyl phosphate; or
bis(diphenylphosphoroxo)-[bis(diphenyl phosphoroxo) C_{1-4} alkyl]cyclohexane.

29. (original) A phosphorus-containing compound according to claim 25, wherein a compound represented by the formula (Ie) or (IIa) is 2,3-bis(diphenylphosphoroxy)norbornane, 2,5-bis(diphenylphosphoroxymethyl)norbornane, 1,2-bis(diphenylphosphoroxy)-4-vinylcyclohexane, 1-diphenylphosphoroxymethyl-3-cyclohexene, 3,3,-dimethyl-5-(diphenylphosphoroxymethyl)cyclohexyl phosphate, or 1,2-bis(diphenylphosphoroxy)-4-[1',2'-bis(diphenylphosphoroxy)ethyl]cyclohexane.

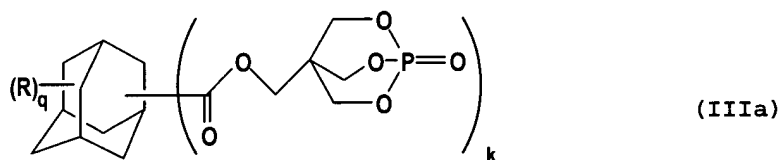
30. (original) A phosphorus-containing compound according to claim 25, wherein a compound of the formula (Ie) is represented by the following formula (If):



31. (original) A phosphorus-containing compound according to claim 30, wherein, in the formula (If), Z^2 and Z^3 are the same or different, each representing a benzene ring; R is a halogen atom, a hydroxyl group, a C_{1-6} alkyl group, or a C_{1-6} alkoxy group; and Y^1 , Y^2 and Y^3 are the same or different, each representing -O- or $-NR^1-$.

32. (original) A phosphorus-containing compound according to claim 30, wherein a compound represented by the formula (If) is 1-diphenylphosphoroxo-3-diphenylphosphoroxo methylcyclohexane or 3,3,-dimethyl-5-(diphenyl phosphoroxymethyl)cyclohexylphosphate.

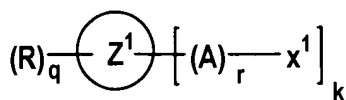
33. (original) A phosphorus-containing compound according to claim 1, wherein a compound of the formula (III) is represented by the following formula (IIIa):



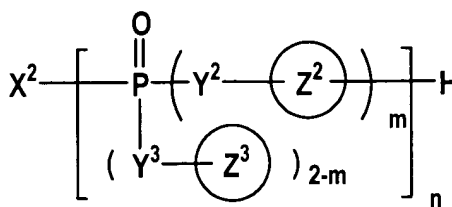
wherein R, q and k have the same meanings as defined above.

34. (original) A phosphorus-containing compound according to claim 33, wherein, in the formula (IIIa), R is a carboxyl group, a halocarboxyl group, or a C_{1-4} alkyl group.

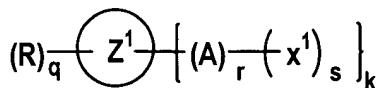
35. (original) A process for producing a phosphorus-containing compound represented by the formula (I), (II) or (III) recited in claim 1, which comprises reacting a compound represented by the following formula (I-1), (II-1) or (III-1) with a compound represented by the following formula (I-2), (II-2) or (III-2):



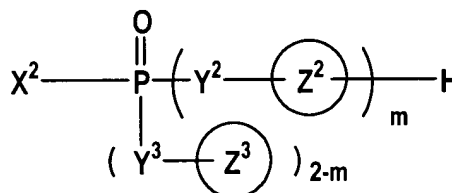
(I-1)



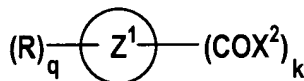
(I-2)



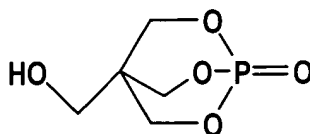
(II-1)



(II-2)



(III-1)



(III-2)

wherein X^1 represents a hydroxyl group, a thiol group, an amino group, or a substituted amino group; X^2 represents a halogen atom, a hydroxyl group, or an alkoxy group; and the Z^1 , Z^2 , R , Y^1 , Y^2 , Y^3 , k , m , q , r and s have the same meanings as defined above.